SUPPLEMENTARY INFORMATION

Boronic acid-modified lipid nanocapsules : novel platform for the highly efficient inhibition of hepatitis C viral entry

Manakamana Khanal,1 Alexandre Barras,1 Thibaut Vausselin,2 Lucie Fénéant,2 Rabah Boukherroub,1 Aloysius Siriwardena,3 Jean Dubuisson2* and Sabine Szunerits1*

1Institut de Recherche Interdisciplinaire (IRI, USR CNRS 3078), Université Lille 1, Parc de la Haute Borne, 50 Avenue de Halley, BP 70478, 59658 Villeneuve d'Ascq, France;
2Institut Pasteur de Lille, Center for Infection & Immunity of Lille (CIIL), F-59019 Lille, France; Inserm U1019, F-59019 Lille, France; CNRS UMR8204, F-59021 Lille, France. Université de Lille Nord de France, F-59000 Lille, France;
3Laboratoire de Glycochimie des Antimicrobiens et des Agroressources (LG2A), (FRE 3517-CNRS), Université de Picardie Jules Verne, 33 Rue St Leu, 80039 Amiens, France

1H NMR spectra of BA compound

1H NMR analysis of the amphiphilic boronic acid compound shows the presence of two doublets at 7.80 ppm and 7.59 ppm, which confirms the presence of the aromatic protons of the aminophenylboronic acid moiety. 1H NMR analysis shows also the presence of a singlet at 8.56 ppm, confirming the presence of the amide link between the 4-aminophenylboronic acid and the carboxylic acid. Moreover, taking one aromatic proton of the BA moieties (2 x 2 H for the 4-aminophenylboronic acid) as integration reference, the –CH₃ of Brij-58P at 0.88 ppm integrates for roughly 3 H. The amphiphilic boronic acid compound presents 50% of BA moieties at the chain end of Brij-58P.

*To whom correspondence should be sent: jean.dubuisson@ibl.cnrs.fr, Sabine.Szunerits@iri.univ-lille1.fr
Figure S1. Analysis of amphiphilic boronic acid compound (2) by NMR spectroscopy.